AMENDMENTS TO THE DRAWINGS

Replacement formal Figures 2, 5, 16, and 19-24 are submitted concurrently herewith under a separate cover letter.

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning on page 23, line 1 as follows:

71 base station control unit ~~multiplexing unit~~

Please amend the paragraph beginning on page 23, line 2 as follows:

72 multiplexing unit ~~base station control unit~~

Please amend the paragraph [0046] beginning on page 33 as follows:

[0046] First, the RF unit 234 of the radio base station 20 receives a radio packet from the mobile station 30 via the antenna 235. The RF unit 234 downconverts a signal having a predetermined uplink frequency which complies with ARIB STD-T75, thereby generating an analog baseband signal. The demodulation unit 236 converts the analog baseband signal generated in the RF unit 234 into a digital baseband signal. The demodulation unit 236 performs differential ~~delay~~ detection on the digital baseband signal to obtain a detection data string, and then outputs the detection data string as reception data RXDATA. The reception data RXDATA is inputted, together with reception data clock RXCLK reproduced from the baseband signal, into the reception data buffer unit 238.

Please amend the paragraph [0063] beginning on page 41 as follows:

[0063] In the present embodiment, the downlink transmission data generating unit 111 of the communication control unit 10 generates, immediately after receiving an ACK/NACK signal, a payload of a response packet corresponding to the signal, and transmits the payload. For this reason, if neither a timing of outputting an ACK/NACK packet from the reception processing unit 113 of the communication control unit 10 nor a timing of transmitting a response packet from the radio base station 50 ~~20~~ is adjusted, the turnaround time changes depending on the length of the inter-station transmission path 40. In the present embodiment, the uplink transmission path delay adjusting unit 531 is provided in the radio unit 53, and an output timing of data retained in a reception data

buffer is adjusted, such that the turnaround time is always to be a predetermined turnaround time regardless of the length of the inter-station transmission path 40.

Please amend the paragraph [0065] beginning on page 42 as follows:

[0065] Note that, the delay time value is calculated in the communication control station 10 with a precision of a base clock that is the fastest operation clock of the radio base station 50 ~~20~~ by adding, to a difference between a predetermined maximum transmission path delay time τ0, which is allocated to the system, and an actual uplink transmission path delay timeτdu, which has been previously measured and a difference between the predetermined maximum transmission path delay time τ0 and an actual downlink transmission path delay time τdd, which has been previously measured (i.e., 2τ0-τdd-τdu), a processing delay value in the RF unit 234 and a processing delay value in the demodulation unit 236, respectively. The uplink transmission path delay adjusting unit 531 adjusts the head point of the TDMA frame by a clock unit of the base clock SCLK.

Please amend the paragraph [0066] beginning on page 43 as follows:

[0066] The uplink transmission path delay adjusting unit 531 also adjusts a phase between a read clock DCLK3 and uplink transmission data in the communication control station 10. For example, in the case where a phase relation between the read clock DCLK3 and the uplink transmission data is as shown in (a) and (b) of FIG. 11A, it is unknown whether the UW detection unit 115 takes in the uplink transmission data with a timing shown in (c) or (d) of FIG. 11A. This prevents a stable data intake. However, in the uplink transmission path delay adjusting unit 531 of the present invention, delay adjustment is performed by the clock unit of the base clock SCLK of the radio base station 50 ~~20~~ to have an appropriate phase relation between a rising edge of the read clock DCLK in the communication control station 10 and a point of variation of the uplink transmission data that is inputted into the line driver 24. Since the frequency of the base clock SCLK of the radio base station 50 ~~20~~ is synchronized with the frequency of the base clock SCLK of the communication control station 10, a phase relation shown in FIG. 11B is maintained between the read clock DCLK of the communication control

station 10 and the uplink transmission data. As a result, a latch circuit for reading the uplink transmission data is no longer necessary in the communication control station 10.

Please amend the paragraph [0070] beginning on page 46 as follows:

[0070] In the present embodiment, the downlink transmission data generating unit 111 of the communication control unit 10 generates, immediately after receiving an ACK/NACK signal, a payload of a response packet corresponding to the signal, and transmits the payload with an identification code added thereto for identifying the response packet. For this reason, if neither the timing of outputting an ACK/NACK packet from the reception processing unit 113 of the communication control unit 10 nor the timing of transmitting the response packet from the radio base station 60 ~~20~~ is adjusted, the turnaround time changes depending on the length of the inter-station transmission path 40. In the present embodiment, the slot information extracting unit 631 is provided in the radio unit 63, and a transmission timing of a particular packet (response packet) is adjusted, such that the turnaround time is always to be a predetermined turnaround time regardless of the length of the inter-station transmission path 40.

Please amend the paragraph [0074] beginning on page 49 as follows:

[0074] As shown in FIG. 23, in a TDMA frame transmission format of the DSRC system, there always exists, within the TDMA frame, one control slot (FCMS) with which the mobile station 30 does not perform transmission, the control slot being allocated to a downlink. In the mobile communication system of the present invention, the TDMA frame transmission format of the DSRC system used for the radio link is also used for the inter-station transmission path 40, and transmission is performed, using the same transmission format as that used in a radio domain. Therefore, there exists a FCMS on the inter-station transmission path 40 too. In the fourth embodiment, since reception data from the mobile station 30 does not exist in the FCMS, the FCMS is used for collecting, in the communication control station 10, monitoring data about the radio base station ~~20~~ 70.

Please amend the paragraph [0075] beginning on page 49 as follows:

[0075] FIG. 14 shows a structure of a mobile communication system according to a fourth embodiment of the present invention. In FIG. 14, the mobile communication system according to the fourth embodiment comprises a base station including the communication control station 10 and a radio base station 70, and the mobile station 30. The communication control station 10 and the radio base station 70 are connected by the uplink and the downlink inter-station transmission paths 40. The radio base station 70 ~~20~~ includes the line receiver 21, the reference timing detection unit 22, the radio unit 23, a base station control unit 71, a multiplexing unit 72 and the line driver 24.

Please amend the paragraph [0080] beginning on page 51 as follows:

[0080] FIG. 15 shows a structure of a mobile communication system according to a fifth embodiment of the present invention. FIG. 16 shows a detailed structure of a control unit 18. In FIG. 15, the mobile communication system according to the fifth ~~fourth~~ embodiment comprises a base station including a communication control station 80 and a plurality of radio base stations 100-1 to 100-n, and the mobile station 30. The communication control station 80 ~~10~~ is connected to each of the radio base stations 100-1 to 100-n by uplink and downlink inter-station transmission paths 40-1 to 40-n, respectively. Each of the plurality of radio base stations 100-1 to 100-n has the same structure as that of any of the radio base stations 20, 50, 60 and 70 described in the above first to fourth embodiments. The communication control station 80 includes the control unit 18, and a plurality of line drivers 12-1 to 12-n and a plurality of line receivers 13-1 to 13-n corresponding to the radio base stations 100-1 to 100-n, respectively.

Please amend the paragraph [0092] beginning on page 58 as follows:

[0092] The method described in the above third embodiment for adjusting the timing of transmitting the downlink data produces a great effect in the case where there are the plurality of radio base stations 100 as described in the fifth embodiment. If a delay adjustment error does not occur among the plurality of radio base stations 100, a part of a prescribed permissible error Δ Tabs in addition to a standard turnaround time T can be allocated for a transmission path delay. However, in practice, a delay adjustment error

~~ΔT~~ Δτ occurs as shown in FIG. 18, and the permissible error that can be allocated for the transmission path delay is reduced by a maximum error ~~2ΔT~~ 2Δτ. For this reason, adjusting the output timing of downlink transmission data at each of the radio base stations 100 allows the error to be suppressed effectively.